

## Economic Census Provides Detailed Picture of U.S. Industry

*The latest Economic Census reports are a valuable source of information to analysts and policymakers in business, Federal, State, and local governments. The data are the first to use the new NAICS industry classification system, which includes new categories for emerging industries in high-tech manufacturing, communications, and services.*

The 1997 Economic Census provides detailed information on all nonagricultural industries in the United States. Census data are a rich source of information for policymakers, business analysts, marketing specialists, planners, and economic development officials. The census includes data on sales, employment, pay, costs, and capital expenditures. Analysts can use the data to compare pay in different industries, find out what inputs and components are purchased by various types of manufacturers, learn what types of retail stores are the most important outlets for a particular product, or evaluate the extent to which local businesses are capturing local retail business. Many data items are available for geographic areas, including States, metropolitan areas, and counties.

Every 5 years, the U.S. Bureau of the Census collects data from establishments in all U.S. industries. The bulk of the reports from the most recent 1997 Economic Census was scheduled for release in 1999, but specialized reports, such as merchandise line sales for retail businesses, will be released in years 2000 and 2001. A guide to the Economic Census data can be found on the Internet at <http://www.census.gov/epcd/www/guide.html>. The 1997 Census is the first to use the new North American Industrial Classification System (NAICS), an updated classification of industries that replaces the Standard Industrial Classification (SIC). The NAICS system better reflects today's economy and makes it easier to find data on new emerging industries in high technology, communications, and service sectors that were previously lumped with other industries in the SIC system (see box, "The North American Industrial Classification System"). The 1997 Census is the first to be released primarily on the Internet and CD-ROM. Electronic reports can be accessed at the census web site <http://www.census.gov/prod/www/abs/economic.html>. Analysts can conduct their own database queries to create customized reports on industries or geographic areas at the Census Bureau's "American Factfinder" web site <http://factfinder.census.gov>. Only summary reports will be published in printed format.

The Economic Census covers all nonagricultural industries, including mining, manufacturing, construction, utilities, wholesale and retail trade, transportation and warehousing, and services (separate censuses of agriculture and governments were also conducted in 1997). Number of establishments, employees, payroll, and value of output (sales, revenue, value of production) are collected for all industries. Other items, including worker wages and hours, benefits, costs, energy consumption, purchases and expenditures, are collected for selected industries. Data are summarized in industry and geographic reports. Industry series reports provide detailed tabulations of national and State data for specific industries. Geographic area series reports available for some industries tabulate basic data for each county, metropolitan area, and place.

As this issue of *Rural Conditions and Trends* was being written, only a small portion of the data had been released. In this issue, we provide two brief examples of how the Economic Census data can be used. First, an analysis of the semiconductor industry shows how industry report series data can be used to profile an important industry. We then provide a brief analysis of retail trade patterns in Montana to show how geographic area series data can be used to analyze regional development issues. [Fred Gale, 202-694-5349, [fgale@ers.usda.gov](mailto:fgale@ers.usda.gov)]

### The North American Industrial Classification System

The North American Industrial Classification System (NAICS) is replacing the Standard Industrial Classification system in the reporting of industry statistics by the Federal Government. The 1997 Economic Census is the first data product to use the NAICS system. NAICS was developed jointly by the United States, Canada, and Mexico to provide a uniform statistical system across North America. Information on the classification system and how it compares with the SIC codes can be found on the Internet at <<http://www.census.gov/epcd/www/naics.html>>.

The NAICS codes follow a hierarchy, with two-digit codes assigned to broad sectors such as mining, construction, manufacturing, and six-digit codes for the most detailed industries. For example, manufacturing industries NAICS codes begin with "3" as the first digit. NAICS 334 is Computer and Electronic Product Manufacturing. That category includes six subcategories represented by four-digit codes 3341 through 3346 listed in table 1. The most detailed industries have six-digit codes. The Semiconductor and Other Electronic Components (NAICS 3344) category has eight six-digit industries. Seven of these industries correspond exactly to codes in the old SIC classification. However, establishments in NAICS 334418, Printed Circuit Assembly, were formerly found in three different SIC categories: 3577, 3679, and 3661. The value of the NAICS is in its ability to more easily analyze data for newly emerged industries such as Printed Circuit Assembly, which were hidden in various categories in the SIC classification. However, it also presents a difficulty in matching new data tabulated under the NAICS system with earlier SIC-based data.

Table 1  
**Example of NAICS classification and correspondence to SIC**

NAICS	Description	SIC	Description
334	Computer and Electronic Product Manufacturing		
3341	Computer and Peripheral Equipment Manufacturing		
3342	Communications Equipment Manufacturing		
3343	Audio and Video Equipment Manufacturing		
3344	Semiconductor and Other Electronic Components		
334411	Electron Tube Manufacturing	3671	Electron tubes
334412	Bare Printed Circuit Board Manufacturing	3672	Printed circuit boards
334413	Semiconductor and Related Devices	3674	Semiconductors, related devices
334414	Electronic Capacitor Manufacturing	3675	Electronic capacitors
334415	Electronic Resistor Manufacturing	3676	Electronic resistors
334416	Electronic Coil, Transformer, and Other Inductors	3677	Electronic coils, transformers
334417	Electronic Connector Manufacturing	3678	Electronic connectors
334418	Printed Circuit Assembly (Electronic Assembly)	3577	Computer peripheral equipment, not elsewhere classified
		3679	Electronic components, not elsewhere classified
		3661	Telephone and telegraph apparatus (consumer external modems)
334419	Other Electronic Component Manufacturing	3679	Electronic components, not elsewhere classified
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing		
3346	Manufacturing and Reproducing Magnetic and Optical Media		

Source: U.S. Bureau of the Census.